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Agilent Ref: 10010792-1
United States Application Serial No. 10/023,375**RESPONSE**

In view of the following remarks, the Examiner is respectfully requested to withdraw the rejections and allow Claims 1-17 and 29-41, the only claims pending and currently under examination in this application.

FORMAL MATTERS

Claims 1-17 and 29-41 were examined and rejected.

Claims 1, 10 and 30 have been amended to specify that the plurality of resistors of each printhead die is bonded to a surface of the single orifice plate, such that the resistors are in operational alignment with the orifices to produce at least one firing chamber. Support for this amendment may be found throughout the specification, for example at p. 11, line 31 to page 12, line 16.

Claims 18-28 were previously canceled.

As the above amendments contain no new matter, their entry is respectfully requested.

REJECTION UNDER 35 U.S.C. §103

Claims 1-17 and 29-41 have been rejected under 35 U.S.C. § 103(a) as allegedly being rendered obvious by Kneezel et al. (U.S. Patent No. 5,939,206) in view of McDevitt et al. (U.S. Patent No. 6,713,298).

With respect to rejections made under 35 U.S.C. § 103, MPEP § 2142 states:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. **Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) [emphasis added].

As presented in the prior response, the instant claims recite multiple printhead dies where each printhead die comprises a top and bottom surface in which the top

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surface includes a plurality of resistors. The top surface of each printhead die is bonded to a single orifice plate having a plurality of orifices such that the resistors are in operational alignment with the orifices to produce at least one firing chamber. In other words, the orifices of the single orifice plate are lined up with the resistors of each printhead die as evident from the example provided below.

For example, the orifices may be arranged in parallel rows on the elongate member. Where this arrangement is employed, the resistors on the resistor assembly of the printhead dies will also be arranged in corresponding rows so that the rows of resistors are in substantial registry (e.g. alignment) with the rows of orifices.

(Specification, page 12, lines 5-10).

In making this rejection, the Examiner alleges that Kneezel et al. disclose "the invention as substantially claimed" (P. 3, Office Action). The Examiner seems to be equating element (137) from Figure 6 of Kneezels' disclosure with the single orifice plate of the instant invention. Element (137) is described by Kneezel as "an ink manifold with openings (not shown) aligned and sealed with the inlets of the printhead subunits to prevent ink leakage therefrom" (col. 24, lines 40-43). As such, the ink manifold supplies ink to the printhead inlets by ink passing through the ink manifold opening to the printhead inlet.

The Examiner appears to find Applicants' orifice plate equivalent to element (137) because the manifold is described as having openings and appears to have a number of printhead subunits (110) bonded to it, as illustrated below.

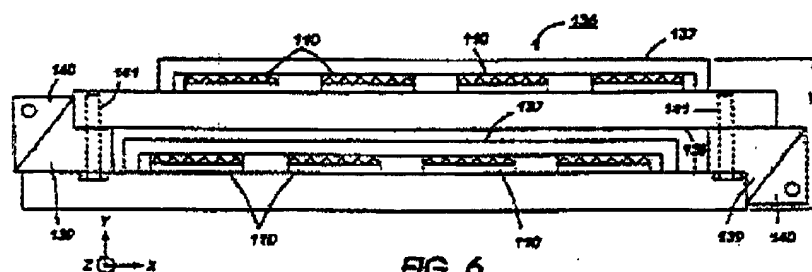


FIG. 6

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Although Figure 6 does not show the manifold openings or the printhead inlets, Figure 5 provides a detailed view of a single printhead having an exemplary printhead inlet (44). As demonstrated in Figure 5, a printhead inlet (44) is an opening in the substrate (60) which includes the ink reservoir (43). Although Figure 5 does not show the ink manifold (137 of Figure 6); the manifold would be positioned adjacent to substrate (60) because the manifold serves to supply ink to the printhead inlet (44). Accordingly, the opening of the ink manifold would line up directly with the printhead inlet (44).

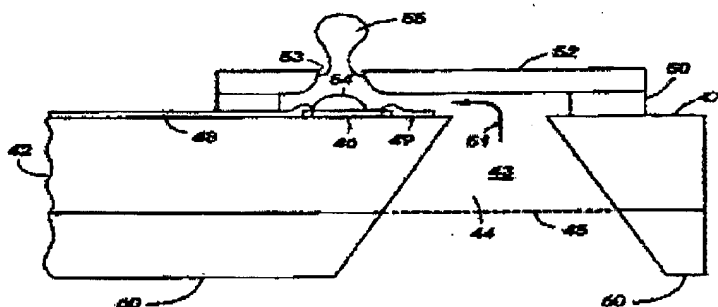


FIG. 5

However, the instant claims require that the orifices of the orifice plate line up with the resistors of each printhead die. In Figure 5 above, the resistor (46) is not aligned with the printhead inlet (44). Accordingly, the ink manifold (137 of Figure 6) opening would fail to line up with the resistor (46) because the opening is aligned with the printhead inlet (44).

As such, Kneezels' ink manifold (137) is not the equivalent to the single orifice plate as presently claimed because the manifold openings do not line up with the resistor (46). Therefore, Kneezel et al. fail to teach or suggest each and every element of the present invention.

As the McDevitt et al. reference was cited solely for teaching that biopolymers can be applied to a substrate using ink-jet printer heads, this reference fails to make up for the fundamental deficiency in Kneezel et al.

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Because the combined teachings of Kneezel et al. and McDevitt et al. fail to teach or suggest each and every element of the claimed invention, the Applicants submit that a *prima facie* case of obviousness has not been established. Accordingly, the Applicants respectfully request that the rejection of Claims 1-17 and 29-41 be withdrawn.

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CONCLUSION

In view of the amendments and remarks above, the Applicants respectfully submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone the undersigned at 650-833-7770.

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to Deposit Account No. 50-1078, order number 10010792-1.

Respectfully submitted,

Date: February 28, 2007

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